A COMPARISON OF SOCIAL ADJUSTMENT
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A COMPARISON OF SOCIAL ADJUSTMENT BETWEEN HOME AND
TRADITIONALLY SCHOOLED STUDENTS
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Compulsory school attendance laws had been legislated in all 50 states by 1918, based partially on the assumption that traditional schools provided the best source of social skills training as well as appropriate social adjustment (Cremin, 1988). Traditional schools provide for regular classroom contact with children of the same age and it has been assumed that this regular contact with other children aided appropriate social adjustment. By their very nature, however, home schools do not provide for regular formal classroom contact with children other than siblings. Because of this obvious difference, parents, educators, legislators, and courts have questioned whether children schooled at home are as socially well adjusted as their agemates in traditional programs. Investigation of this possible difference was the focus of this study. Parents who consider educating their children at home are frequently fearful of the impact upon their children's social lives (Johnson, 1991). Taylor (1986) described a study of 441 families in the state of Washington in which most of the people who heard about home schooling for the first time questioned its social impact before they asked about academics.

Ladd (1979) and LeCroy (1983) suggested that the consequences of a lack of peer contact may be severe, and include phenomena such as dropping out of school, juvenile delinquency, and mental health problems. The West Virginia Supreme Court echoed this concern when it ruled against home school parents, stating in their opinion that the children were being separated from organized society and would therefore become ". . . incapable of coping with life outside of their own families" (State v. Riddle, 1981).

Decisions concerning schooling and social adjustment have often been made solely upon feelings and assumptions and not upon empirical research; therefore, laws affecting home schooling vary considerably from state to state (Tobak & Zirkel, 1983). Taylor (1986) suggested that the prevalence of opposing views indicated "the need for substantial evidence upon which to base decisions of social implication" (p. 10).

Social adjustment, however, is complex and difficult to measure (Jordan-Davis & Butler, 1985; Gresham & Elliott, 1984). Gresham and Elliott (1984) suggested that in order to assess social adjustment, it is necessary to define social skills, and then provide a framework for classifying social skills difficulties. Their definition of social skills included peer acceptance, socially acceptable behavior, and validation of behavior by significant people in the child's life. According to Gresham and Elliott (1984), social skills difficulties can be classified into four general areas. The first is a skill deficit, in which the child simply does not know the skill necessary to act appropriately according to socially acceptable standards. The second is performance deficit, where the child knows the appropriate skill but is unable to perform at acceptable levels. The other two problem areas involve the child's level of self-control and relies

upon the amount of emotional involvement. For example, a child is either hindered from learning an appropriate social skill due to a lack of control caused by anxiety, or they have the knowledge of the skill but are unable to perform because of anxiety or some other emotional block. For a child to be socially well adjusted, therefore, he or she must meet several conditions. First, he or she must possess a knowledge of the skill to be performed (Bandura, 1977; Michelson, Sugai, Wood, & Kazdin, 1983). Second, he or she must feel comfortable enough to both learn and perform the skill acceptably (Greenwood, Walker, Todd, & Hops, 1977). And thirdly, he or she must be able to perform the skill appropriately at levels deemed acceptable by others (Asher & Hymel, 1981; Richarz, 1980).

For the purpose of this study, a knowledge of appropriate assertive responses was chosen as an indication of social knowledge (Michelson et al., 1983; Tolor, Kelly, & Stebbins, 1976). In sociometric studies, children who were classified by their peers as being assertive rather than passive or aggressive, were chosen more frequently as friends or rated as being more popular (Asher, 1982; Wojnilower & Gross, 1984).

The Children's Assertive Behavior Scale (CABS), designed by Michelson and Wood (1982), was chosen to assess knowledge of appropriate assertive responses in each of the children in this study. The 27 items of the CABS provides for responses along a continuum of passive-assertive-aggressive possibilities. Each item has five possible answers in scrambled order which include very passive, passive, assertive, aggressive, and very aggressive responses (Michelson et al., 1983). The separate passive and aggressive scores generated, along with the total assertive score, provides information as to "whether the child is deficient in assertive responses due to passive or aggressive social behaviors" (Michelson et al., 1983, p. 30).

Michelson and Wood (1982) reported that the CABS correlated at .38 with behavioral observations. They further stated that teachers' ratings showed significant, though variable, correlations. The test-retest reliability in their study was reported to be .87.

The second condition of appropriate social adjustment, social comfort, was assessed by measuring a child's self-concept. Positive self-concepts have been shown to be an affirmative sign of comfort with self and others (Coopersmith, 1967; Taylor, 1986). Children with high self-concepts tend to be more involved in both formal and informal situations indicating a lack of social anxiety (Darby & Schlenker, 1986).

For the purpose of this study the Piers-Harris Children's Self Concept Scale (PHCSCS) was chosen to measure a child's self-concept and feelings of social comfort. The PHCSCS has been used extensively in research with children and has been described as "one of the best instruments available for assessing children's self-regard" (Smith & Rogers, 1977, p. 554). Each of the 80-item declarative statements is answered with either yes, if the item is a true statement about him or herself, or no if it is not. The total positive score is considered to be a measure of the child's self-concept. The higher the child's score, the more positive the child's self-concept and feelings of social comfort.

In a study using third graders, the PHCSCS was shown to have a test-retest reliability of .86 (Parrish & Taylor, 1978). In a study over a seven-month period, a test-retest reliability of .62 was reported (Smith & Rogers, 1977). Piers (1985) suggested that the median test-retest reliability coefficient was .73.

The validity of the PHCSCS has also been assessed. In one study scores on the PHCSCS correlated well with peer acceptance over a four-year period. Robinson and Shaver (1976) computed a predictive validity coefficient of .61. When compared with instruments such as the California Test of Personality and the Coopersmith Self-Esteem Inventory, convergent validities as high as .71 have been computed (Taylor, 1986).

Probably the most valid measure of actual social adjustment, however, is found in the third condition which is observed behavior (Gresham & Elliott, 1984; Richarz, 1980). Prosocial behavior is described as the performance of acquired skills considered appropriate by normal society (Bandura, 1977). It is also portrayed as the use of assertive rather than aggressive responses (Dodge, 1985). The Direct Observation Form (DOF) of the Child Behavior Checklist (Achenbach & Edelbrock, 1983) was chosen to record the children's observed behaviors by trained observers.

The DOF is made up of 96 behavior problem items and includes a measure of on-task behavior. Each item on the DOF is rated on a 0 to 3 scale where 0 indicates that the behavior was not observed and 3 signifies that the behavior was observed for at least 3 minutes. A sum of the 96 items provides a total problem behavior score (Reed & Edelbrock, 1983).

Reed and Edelbrock (1983) reported interobserver agreement reliability coefficients of .83 on the on-task section, and a .92 on the behavior problem section of the DOF. Evidence of validity has also been provided, in the form of comparisons between scores obtained on the DOF and teacher-reported school performance, adaptive functioning, and total behavior problems (McConaughy, 1985). A significant negative correlation of -.66 (p < .01) was also reported when the DOF was used to compare normal and disturbed boys.

Methodology

A review of literature suggested that the period of greatest social development is between the ages of 7 and 11 (Shantz, 1975). In order to assess social adjustment within this age range, and allow for possible developmental differences (i.e., reading level differences, cognitive development differences, etc.) the age group for this study was narrowed to the 8- to 10-year range.

The parents of 1,061 home schooled children residing in Orange, Seminole, and Lake counties in central Florida were located through information provided either by the Florida Department of Education or local home school support groups. Each of these parents were given an opportunity to include their child or children in the study. Parents who volunteered their children for the project were asked to sign a letter of informed consent and complete a demographic questionnaire. Eventually 178 children were included in the preliminary selection process. Each of these children were asked to complete the Piers-Harris Children's Self-Concept Scale and the Children's Assertive Behavior Scale.

The first 35 male and 35 female children between the ages of 8 and 10 who had been entirely home educated were selected from the original 178 to participate in a group activity during which their behaviors would be video taped and observed by trained observers. Due to the manner in which the study was designed, there was an equal number of males and females. The same procedure was used in the selection of traditionally schooled children. Due to a large population of traditionally schooled students in the three county area, it was possible to match a

traditional student with a home schooled student as to race, gender, age, family size, number and frequency of out of school activities, and socioeconomic status. Although church attendance and frequency of involvement in church activities were included as part of the matching criterion, religious affiliation was not a consideration in matching subjects for this study. These traditionally schooled children also completed the PHCSCS and the CABS. The final research group, therefore, consisted of two subgroups of 70 children from each schooling experience. There was an equal number of males and females in each subgroup. Each subgroup contained children between the ages of 8 and 10. For all practical purposes, the subgroups were equal to each other. All volunteers completed the same paper and pencil instruments using the same instructions.

Each child's responses to the PHCSCS and the CABS were totaled following the instructions for scoring each instrument. The total assertive score on the CABS was used to represent that child's assertiveness (knowledge of appropriate social response). Each child's total positive score on the PHCSCS was used to represent his or her level of self-concept or feelings of social comfort.

In order to video tape the children's behaviors, a large room was found in a central location in Mount Dora, Florida. Various toys (games that required more than one player, puppets, puzzles, and dolls) were placed in the room for use by the subjects. The video camera was located so that its operator could video tape all activity taking place in the room.

The subjects were divided into groups of at least 6 students each from the same schooling population, keeping the age difference in each group within a one year range of one another. Attention was also given to keeping an equal number of male and female subjects in each group. In order to assist in the identification of subjects on the video tape, each child was photographed. No reference was made as to the subject's schooling environment. The children were introduced to the researcher, video camera operator, and each other and given 30 minutes to get acquainted without interference from the researcher or other adult.

Following the initial 30 minutes, the children were instructed by the researcher that for the next 20 minutes they could continue to play in the room. Once the instructions had been completed, the activity within the room was video taped. The operator included all children in the tape during the 20 minute segment.

A second 20 minute video tape was made while the children participated in a group interaction activity. This activity required the children to work together in small groups putting together puzzles. Each child was given permission to not participate if they so chose. Again, care was taken to assure that all children were included on the video tape.

These procedures continued until all groups of children had been video taped in both the free play and group interaction activity. A copy of each tape was made available with the appropriate subject's photographs to trained observers for rating.

Observers consisted of volunteers who were either graduate students in Counselor Education at Stetson University or the University of Central Florida, or individuals with an advanced degree in Counseling. Each volunteer was trained by the researcher and paired with another observer so that an inter-rater reliability coefficient of .90 was maintained.

Each observer followed the instructions and training provided for the Direct Observation Form (DOF) of the Child Behavior Checklist in completing a rating form for each child on the tape.

Each child was observed and rated by two observers and his or her total score was used as that child's problem behavior rating.

Results

Three null hypotheses were tested in this study. Age and gender had been presented in the review of literature as possible confounding variables (Hartup, 1977). Accordingly, a multivariate analysis of variance (MANOVA) was computed using age, gender, and schooling as independent variables and the three measures (PHCSCS, CABS, and DOF) as dependent variables. The MANOVA indicated that there were significant differences between the samples on the vector of three dependent measures (see Table 1); therefore the data were analyzed individually for each dependent variable utilizing a factorial analysis of variance to test hypotheses concerning age, gender, and schooling.

The first two null hypotheses suggested that no significant differences would be found between the mean assertiveness and self-concept

Source	Value	DF	F* F	PR
Age	.906	6	2.117 .05	52
Gender .972	3	1.2	32 .301	
School	.278	3	109.038 .0	000
Age/Gender	.868	6	3.058 .0	007
Age/School	.948	6	1.130 .3	45
Gender/School	.962	3	1.646 .	182
Age/Gender/So	h .880	6	2.779 .	012

^{*} F statistic for Wilk's Lambda is exact.

Table 1. Multivariate tests of significance for PHCSCS, CABS, and DOF by age, gender, and school.

scores of children educated in home or traditional schools as measured by the Children's Assertive Behavior Scale and the Piers-Harris Children's Self Concept Scale respectively. A three-way factorial ANOVA was computed to determine the extent to which variances in assertiveness and self-concept could be attributed to differences based on or interactions among age, gender, or schooling environment. There were no statistically significant (p = .05) main effect or interaction F values for either analysis. Therefore, both null hypothesis one and two were not rejected.

The third null hypothesis indicated that no significant differences would exist between the mean social behavior scores achieved by the research subjects as measured by the DOF. As in the first two analyses, a three-way factorial ANOVA was computed to determine the extent to which variance in social behaviors could be attributed to differences based on or interactions among age, gender, or schooling environment. As can be seen in Table 2, statistically significant (p < .05) main effect differences were found for age and school. A further review of Table 2 reveals a

significant three-way interaction of age, gender, and school-type (see Figure 1 for illustration). This precluded straightforward interpretation of lower order interactions and main effects. Consequently, separate two-way and, when warranted, one-way ANOVAs were computed for each of the age levels and genders.

Source	SS	DF	MS	F	PR
Within Cells	2869.27	7 128	22.4	2	
Age	165.09	2	82.55	3.68	.028
Gender	68.69	1	68.69	3.06	6 .082
Sch	7398.91	1	7398.91	330.0	07 .000
Age/Gender	278.29	2	139.15	6.2	1 .003
Age/Sch		128.5	1 2	64.25	2.87 .061
Gender/Sch	35.39	1	35.39	1.58	3 .211
Age/Gender/Se	ch	271.7	75 2	135.8	7 6.06 .003

Table 2. Analysis of Variance of social behavior by age, gender, and schooling. Figure 1. Effects of interaction of age, gender, and school type on social behavior as measured by the Direct Observation Form (DOF). H.S. means Home Schooled and T.S. meands Traditional Schooled.

The results of the follow-up analyses indicated that the differences observed in Figure 1 for type of school at each age/gender category was the most significant variable. Home schooled (H.S.) students had lower problem behavior DOF scores than did the traditional school (T.S.) students. Null hypothesis three was, therefore, rejected.

Discussion

The results of the data analysis indicated that both groups of children received scores on the PHCSCS that were above the national average. This suggests that how children view themselves may be independent of where they obtain their academic training. Because both groups had higher than average measured self-concepts, they could be expected to be active in both formal and informal social situations as suggested by Coopersmith (1967). Children who have high self-concepts also are less likely to be withdrawn or aggressive (McIntire & Drummond, 1977).

Both groups of children received raw scores on the CABS that were indications that they choose slightly passive responses to social situations. This indicates that the children in this study were not aggressive, but rather somewhat passive in their understanding of social situations. Because children in this age group (8- to 10-year-olds) are rarely given much power and credibility by adults, they may not yet feel socially competent. A lack of social competence creates feelings of anxiety within the individual and thereby generates passive responses (Norton-Ford & Norton-Ford, 1979). Neither group, however, received mean assertiveness scores that could be considered "very passive."

The most significant results of this study were found in actual observed behaviors. The DOF records problem behaviors by type and frequency. Home schooled students received significantly lower problem behavior scores than did their agemates from [a] traditional program. Although the problem behavior scores received by the traditional students in this study were above the national average according to the authors of the DOF, none of the observers felt the behaviors they observed were atypical for the age and gender of the subjects.

Bandura (1977) suggested that children learn to behave from observing and imitating others. It is reasonable to expect that children will imitate the behaviors that they observe most often. Traditionally schooled children spend an average of seven hours per week day over a nine month period in the presence of other children and few adults. It would seem then, that their behaviors would most often reflect those of the majority of the children with whom they associate. In the case of this study, it was observed that traditionally schooled children tended to be considerably more aggressive, loud, and competitive than were the home schooled children of the same age.

In the case of the home schooled children, most of their day is spent with their parents and very few children. The primary models for behavior, therefore, are adults. Based on the social learning theory that children learn by imitating the behaviors of people whom they observe, home schooled children would thus most likely imitate the behaviors of their parents. The home schooled children in this study tended to be quiet, nonaggressive, and noncompetitive. Each child appeared to make up his or her own mind on how to behave.

The results of this study, therefore, draw into question the conclusions made by many educators and courts that traditionally educated children are more socially well adjusted than are those who are home schooled (Educators say, 1989; State v. Riddle, 1981). Although the traditionally educated children participating in this study achieved high mean self-concept and acceptable assertiveness scores, their mean problem behavior scores were well above the normal range of 0 to 6 suggested by the authors of the DOF (Achenbach & Edelbrock, 1983), indicating a lack of appropriate social behaviors. This finding supports many parents', educators', and researchers' suggestions that traditionally schooled children may not be socially well adjusted (Holt, 1981).

In contrast, the home schooled children in this study received mean problem behaviors scores well within the normal range on the DOF. This finding supports the belief held by home school proponents that home schooled children are socially well adjusted (Taylor, 1986). If children have fewer problem behaviors due to imitating adult behaviors, as suggested by this study, less emphasis may need to be placed on social interactions between children. Adult caretakers, whether parent or teacher, may need to become more active in providing appropriate social interactions with the children in their care. More research should be conducted focusing on the social adjustment of traditionally schooled children.

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